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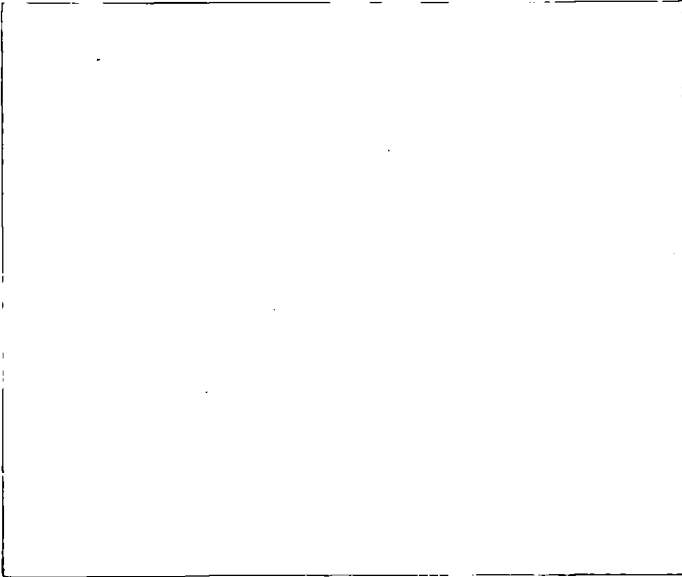
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Mobilization in Lao PDR  
and Vietnam**

Manuel F. Montes



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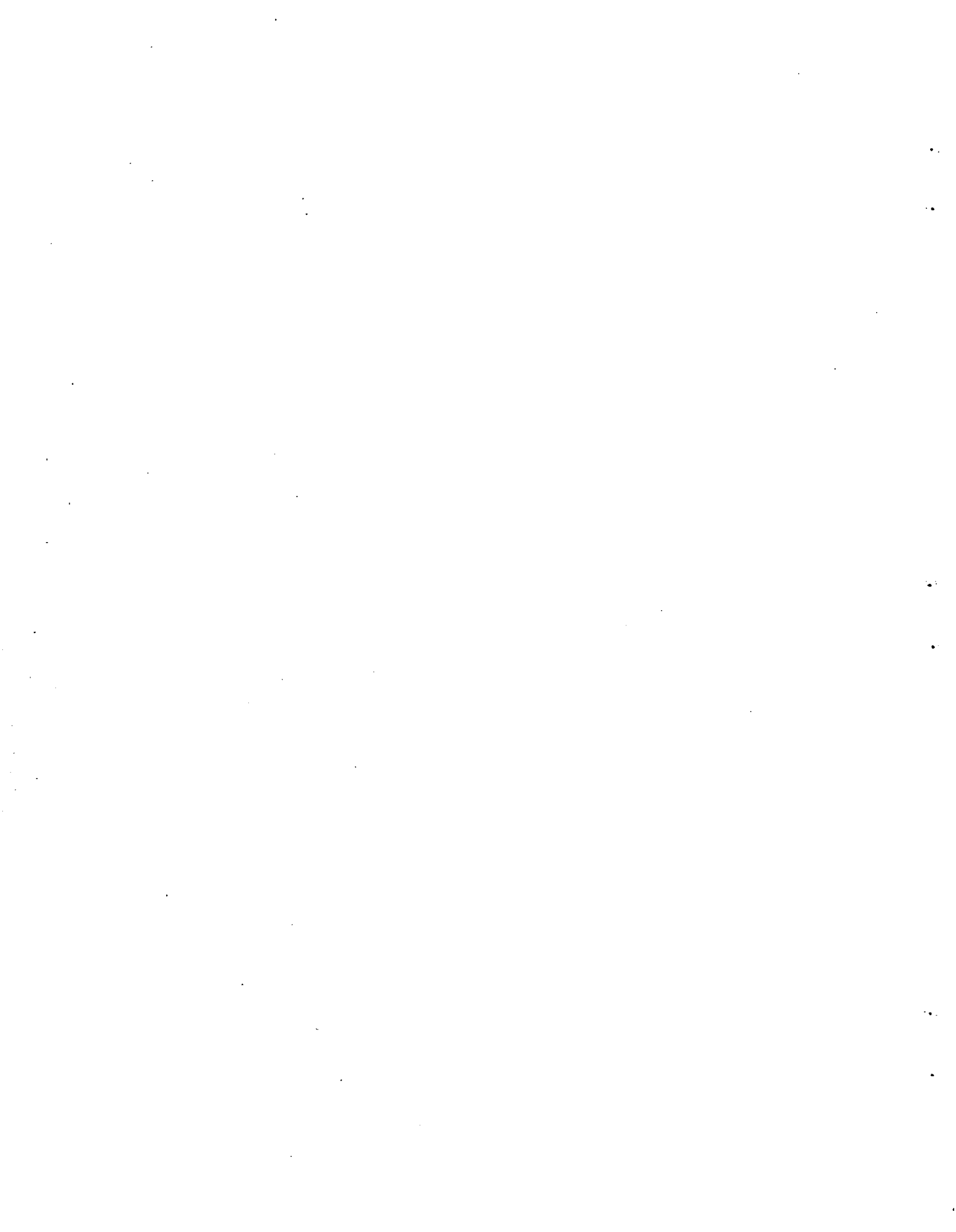
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## Domestic Resource Mobilization in Lao PDR and Vietnam

Manuel F. Montes

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## **ECONOMIC EMERGENCE AND TRANSITION IN MAINLAND SOUTHEAST ASIA**

We must first justify treating the question of resource mobilization in these two disparate countries, the Lao People's Democratic Republic ('Lao PDR'), and Vietnam in one piece on resource mobilization. Using the pretext of geographical contiguity or imaginable cultural affinity provokes boundless suspicion among the scientifically inclined who place great value on social science research on universal tenets. On the other hand, the idea that these two emerging economies are carrying out a transition almost in phase from 'command-and-control' economies to 'market' economies will be viewed rather skeptically by those who take the view, borne out by recent experience, that transition is a complex, situational project.

This paper emphasizes the shared features in the resource mobilization effort in the process of transition between these two countries (which we also refer to as 'the Two' when convenient for the flow of presentation). The paper will also take advantage of differences between the countries to further illustrate these features.

Beyond political restructuring, the economic issue in a transition is how to safeguard a society's stock of productive assets in the process of transferring control of these assets from the state to a widely spread private sector. Institutional change, such as the threat of privatization, can generate incentives contrary to the preservation of the value and the productivity of assets. Price changes can also prematurely undermine the value of these assets, making them subject to disposal at large discounts or scrapping.

By their nature, standard resource mobilization efforts represent a counteracting force to the process of widening the private economy since it consists of convincing economic actors (including only partially compliant state enterprises) to participate in a reverse flow - to channel their surplus income flows and accumulated financial assets away from consumption and speculation in foreign currency and other

speculative real assets (such as gold and real estate) into forms that the whole of society (which the planning state used to and, during transition, still overwhelmingly represents) can use to maintain monetary stability, if not finance capital investment.

Since 1989, the two economies have traversed a significant transition distance but have only begun to address the question of resource mobilization, especially that of savings mobilization. However, the experience especially of Vietnam, but also to some extent of Lao PDR, is that one postpones addressing domestic savings mobilization issues at the peril of losing of macroeconomic control. The record of these two countries also illustrates the potentially positive role the state can play when it still enjoys the power to set interest rates. We shall also see how the cherished functional relationships between savings and interest rates have operated quite mechanically in these experiences and that important questions involve less issues of partial equilibrium in individual markets and more the interaction between the different markets and sectors in an economy. Moreover, with the state setting the price of financing, the interest rate does not quite play the romantic role of arranging a meeting between rates of time preference and the marginal efficiency of investment, as it is supposed to do in a well-managed developing economy.

With large agricultural sectors, these two countries have generally completed the widespread transfer (of control, though not necessarily Western-style ownership) of agricultural assets to non-state actors. In these countries, rough measures of private versus state contribution to output now exceed 60 percent in favor of the private sector. The agricultural sector is the potential and actual source of significant savings surpluses for these economies, even in the case of Cambodia (Boua 1993). In domestic industry, the private sector is emerging in Asian-style, springing Athena-like (but not quite full-grown) from society's head, the state. The state remains a large entity, not only because of its enterprises but also due to its capacity to set prices, particularly in the financial sector, and its demands on financial resources.

The rest of this paper proceeds as follows: the next section, Section 2, presents the contrasts in macroeconomic situation between the two countries; it also sets the tone, a bit in contrast with recent more positive assessments of these countries, for the rest of the paper by presenting the constraints the two countries face in maintaining overall growth. Section 3 presents the savings mobilization experience since 1989 of

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the two countries. Section 4 concludes by summarizing the main insights from this experience.

## MACROECONOMIC CONTEXT

Savings mobilization is an issue about medium-term growth. In terms of per capita income, both countries had per capita incomes of around \$200 (the credibility of exact figures being undermined by not only by exchange rate fluctuation, but also the rudimentary state of national income accounting in both countries). Lao PDR with 4.4 million people and 236,800 km<sup>2</sup> (or a density of 19 person per square kilometer) is one of the least densely populated countries, while Vietnam, with 66.2 million and 330,341 km<sup>2</sup> is among the most densely populated at 200 persons per square kilometer.

We present the differences in medium-term macroeconomic situation between the two countries using an extension of the gap model first used in Chenery and Bruno (1962); the version we employ here is Taylor's (1993) three-gap model, which permits an analysis of the savings gap, the foreign financing gap, and the fiscal gap. The method of calibration, of assigning numerical values to parameters in order to reproduce a consistent data set, was the approach used to construct the numerical model. While recognizing that choices in elasticity values, do embody judgements about industrial structure and the propensity to save, these provided the critical insights into the macroeconomic issues faced by the Two and proved handy in light of the unavailability of long data series on the economies in question. The model is principal utility is in the identification of macroeconomic choices. It is quite limited in generating insights about intersectoral reallocation. The role of expectations is embodied in the model parameters; unstable expectations will mean unstable parameters.

An overall supply constraint is represented by the activity variable 'capacity utilization', which is represented in the model by the variable  $u$  and takes a maximum value of 1. The actual model equations are given in Table 1, while Table 2 provides the data definitions used in implementing the model variables. All the variables are measured as proportions to potential output, with the exception of the public sector borrowing requirement (PSBR) which is measured as a proportion of actual output.

In Equation 1, total investment,  $i$ , is the sum of private investment,  $i_p$ , and public investment,  $i_g$ . Equation 2 proposes that private investment is (linearly determined) through an "animal spirits" parameter,  $i_a$ , as a complementary response to government investment through the parameter  $\alpha$ , and through the accelerator term,  $\beta u$ . Equation 3 is total investment, being the sum of equations 1 and 2.

Total savings,  $s$ , broken into private,  $s_p$ , public,  $s_g$ , and foreign,  $\phi$ , is given in Equation 4. Equation 5 characterizes private savings behavior as a function of activity, with the parameters  $\sigma_0$  and  $\sigma_1$  being jointly determined by the income elasticity of the savings rate. Fiscal effort,  $z$ , defined implicitly in Equation 6 as revenues minus current expenditures excluding debt service on foreign debt, is specified as a linear function of the activity variable in Equation 7 through parameters  $z_0$  and  $z_1$ . In Equation 6, total government savings is defined as the fiscal effort less interest payments on foreign debt; in this equation,  $j^*$  is total interest payments on foreign debt and  $\mu$  is the government share of these payments (which is basically set to 1 for the calibration). Equation 8 expresses the identity that the public sector borrowing requirement (PSBR) as a proportion of potential output,  $\pi u$ , is equal to the amount by which government investment expenditure exceeds government savings.

Equation 9 expresses the balance of payments as foreign savings (equivalent to the current account deficit composed of imports minus exports plus foreign interest payments and net aid,  $na$ ) minus changes in reserves and other unaccounted capital flows,  $DR$ . Imports are broken down into raw material imports,  $m_r$ , whose level depends on economic activity  $u$  and the level of exports,  $x$  (Equation 10); capital imports,  $m_k$ , dependent on the proportion of investment  $(1 - \theta)$  that must be imported (Equation 11); and other imports, such as medicine, and consumer goods,  $m_o$ . The agricultural sector of Vietnam and to a smaller extent Lao PDR heavily depend on imported fertilizer, while all three countries have to import oil for energy requirements. The level of exports is exogenous in the model and assumptions in this variable have to be made jointly with the availability of external finance, even though it affects demand for intermediate inputs through the parameter  $a_2$  in Equation 10.

Equation 12 relates the rate of investment,  $i$ , to the rate of growth of capacity,  $g$ , through a Harrod-Domar equation in which  $k$  represents the inverse of the

incremental capital-output ratio and  $g_0$  represents both the effect of depreciation of capital assets and the underlying growth prospects for the economy.

For purposes of analysis, one can combine Equations 1 to 5 with the condition that

$$i = s$$

and solve for the level of investment to derive the domestic savings gap:

$$(S) \quad is = (s_0 + z_0 - j^* + f) + (z_1 + s_1).$$

The fiscal gap is derived from Equations 2 and 6 through 8:

$$(F) \quad i_f = i_0 + (1 + \alpha) (z_0 - \mu j^*) + [(1 + \alpha) (\pi + z_1) + \beta] u,$$

and the foreign exchange gap comes from Equations 2, and 9 through 11:

$$(E) \quad i_e = (\phi + (1 - a_2) x - j^* - a_0 - m_0) (1 / (1 - \theta)) - a_1 (1 / (1 - \theta)) u$$

The model could only be calibrated on the Lao PDR (1992) and Vietnamese (1991) economies. 1991 was a difficult year for Vietnam, with a drastic devaluation of the dong and forceful effort to cut subsidies to state enterprises resulting in a slowdown in growth from 4.5 percent in 1990 to 3.8 percent in 1991. 1992 was a strong growth year for Lao PDR, with generous external supportive of growth. It is arguable whether either of these two years are equilibrium years for either of these countries, but we attempted to set the parameters so that they can truly be applied to medium term issues.

Table 3 gives the data sets employed to calibrate the model for the two countries. The key contrasts are the following:

1. Vietnam was externally constrained with foreign savings limited to 4.8 percent of output, while the Lao PDR was a comfortable recipient of foreign savings at 7.8 percent of output. It remains to be seen whether with the lifting of the U.S. embargo, Vietnam becomes the kind of recipient Lao PDR was and Lao PDR begins to feel pinched of external assistance as Vietnam begins to compete for the same resources.
2. The investment ratios reflect the relative availability of savings. Lao PDR was able to invest a respectable proportion of 12.5 percent, while Vietnam was constrained to 6.2 percent.
3. The government macroeconomic stances also contrasted sharply. Lao PDR exhibited a deficit in the current fiscal balance of 4.8 percent of output, while

Vietnam had a surplus of 1.5 percent. Government investment in Lao PDR reached 8.3 percent, while Vietnam's investment amounted to only 5.8 percent. Consequently, Lao PDR's PSBR amounted to an unsustainable 14.7 percent, while Vietnam posted 5.8 percent, which would still be high according to market economy standards.

Since 1989, these transition economies experienced significant losses of external assistance from the Soviet bloc countries. Lao PDR managed to accelerate its borrowing program from all the international financial institutions. Vietnam continued to suffer under severe financing constraint during the period of analysis due to the U.S. embargo but will likely be able to enjoy a step increase in the level of assistance in 1994.

Tables 4 (for Lao PDR) and 5 (for Vietnam) summarize the results of the parameterization for each of the models and Charts 1 (for Lao PDR) and 2 (for Vietnam) graph the investment ratio against the rate of capacity utilization based on Equations S, F, and E. The investment ratio along with Equation 12 determine the rate of macroeconomic growth, so that higher levels along the y-axes imply higher growth rates. For both graphs, the schedules for the equilibrium data point are in the dark lines and what we have called 'growth' scenarios are in the lighter lines. The following are the key results from the combined exercise of estimating and evaluating an alternative growth scenario:

1. The ICORs for both countries have appeared to be in the low range, based on their growth performance since 1989 and low investment ratios. In the case of Vietnam, only government fixed investment was available but based on observations (for example, ADB 1993), we augmented total investment with private investment amounting to 4 percent of actual GDP for 1991. But this only increased Vietnam's apparent ICOR to 1.0. For the growth scenario, we increased Vietnam's ICOR to 1.5 in recognition of increasing emphasis on infrastructure projects in Vietnamese planning. An ICOR in the range of 3 is more realistic in a five-year horizon and will require larger investment ratios than the levels we analyze here, implying greater fiscal and savings effort. Lao PDR's ICOR was 1.75 and was retained at this level in the growth scenario; Lao PDR also has large infrastructure projects, such a hydropower projects, among its development plans.

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The setting of ICOR constrains the rate at which trend growth rate and capital depreciation in the model, via the parameter  $g_0$  in Equation 12, affects growth. For Lao PDR, this parameter was set at zero, reflecting the practical absence of industrial stock that would be depreciated by market opening, while for Vietnam, the value of this parameter implies that if Vietnam manages to invest 14 percent of output, 14 percent of investment would be devoted to depreciating the existing stock.

2. Lao PDR's elasticity of fiscal effort was 0.4 and its private saving elasticity was 0.3. This is consistent with the observation that Lao PDR is a 'low revenue country' (Sundberg 1993, p. 11). Both of these elasticities are maintained for the growth scenario. Vietnam's recent experience suggests revenue elasticities of fiscal effort at 0.9 and private savings 0.8; for the growth scenario it is assumed that Vietnam will be able to raise its fiscal effort to elasticity to 1.0.

For Lao PDR, with a limited manufacturing base, the proportion of investment domestically was 0.38, while for Vietnam this was 0.85. Both countries share a 0.8 elasticity of intermediate import demand with respect to domestic activity of 0.8. Fertilizers and pesticides for Vietnam's intensive agriculture and oil have been key imports. With respect to exports, the elasticity of intermediate import demand was 0.15 for Lao PDR, and 0.19 for the equilibrium data set and raised to 0.25 for the growth scenario in the case of Vietnam.

These parameters reflect the relatively more vulnerable external sector of Lao PDR. In the regard to export as a proportion to activity, an exogenous variable, this was projected to increase from 0.054 in the equilibrium data set to 0.074 in the growth scenario for Lao PDR and from 0.10 to 0.14 for Vietnam.

In the growth scenario, Vietnam was expected to increase its current account deficit from 0.05 to 0.06 of economic activity, while Lao PDR was presumed to be able to maintain 0.07 of economic activity. These are rather large figures, and probably are most applicable to the next three years, but not much beyond. Lao PDR has managed to obtain concessional financing so that its foreign interest payments amount to less than 1 percent of output. For Vietnam it is assumed that the proportion of output devoted to interest payments will decrease from 0.059 to 0.052, and that the build-up in arrears included in the calibration would be set to zero in the growth scenario.

3. While both countries have been exhibiting strong growth in recent years, the attainability of growth of around 7 percent (in the case of Lao PDR an investment rate of around 12 percent and for Vietnam about 14 percent) is quite precarious and

cannot be maintained based on the parameters estimated from the equilibrium data set alone.

In the case of Lao PDR, 7 percent growth rate has been associated with current account deficits in the order of 8 percent, negative government savings, and a public sector borrowing requirement of 15 percent. This 'equilibrium' is shown as point K in Chart 1. In the 'growth' scenario, depicted in Chart 1 without identifying a single equilibrium point, the foreign exchange and fiscal constraints permit growth at 7 percent to be attained while reducing the current account deficit by about 3.8 percentage points and the PSBR from 14.6 percent to 5.8 percent. This equilibrium is shown in Chart 1 in the region marked as point L.

For Vietnam to attain growth rates of about 7.4 percent, it would have to operate its economy in the region marked by H in Graph 2, moving up from point F, and increasing the investment ratio from about 8.5 of **actual** output to 15.5 percent. The shift outward of the external constraint is made possible by the increase in export, current account deficits, and the accommodation in interest payments. However, the savings constraint, even in light of the relatively high elasticities we have assumed, appears to be the binding constraint, indicating that sustainable growth might be around the point G, with an investment ratio of only 12 percent and greater inflationary pressure (due to greater capacity utilization).

These contrasts identify the limits imposed by financing on macroeconomic policy. One might follow recent Lao strategy (which the Lao themselves are shifting out of (Souvannavong 1994), and sustain growth through external finance, but it will be difficult to repeat the Laotian success of obtaining such high levels of financing in concessional terms. Even the easing of external constraints, attaining a sustainable 7 percent rate of growth will require significant effort for Vietnam.

## **PRICES AND INSTITUTIONS**

It is possible but inaccurate to interpret the domestic resource effort of Lao PDR and Vietnam since 1989 as a matter of installing the right set prices for capital finance and reducing government deficits. While both countries present considerable progress on both fronts, they faced formidable institutional constraints that could have created serious political consequences, if not inflicted crippling economic damage, if they had relied on price and deficit policies. These institutional constraints were part of the calculations of the two governments which sought to retain power while carrying out

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reform, in contrast to the Eastern European context where new governments sought to apply revolutionary Western ideas of market reform.

The state in both Lao PDR and Vietnam experimented with a larger repertoire of policies, learning about the capacity of price changes to do both good and harm in the process (and mostly both at the same time). In the case of Vietnam, deposit interest rates might have tended to be "too high" while expenditure reduction has been "too timid" during the process. In the case of Laos, dependence on external finance might have been considered to be too "too high" (though at concessional rates) with consequent large public sector borrowing levels and lending rates "too low" relative to deposit rates. While the policies of both countries might be classed as "good," it is not clear whether these were good because of the types of policies followed or because growth did not slow down during the reform period.

### **Common Features**

The countries in the region have had to deal with the following common features in the resource mobilization effort:

**Multiple currencies and units of account.** The trading networks in the region precede Western colonial participation and geography has always limited the ability of postcolonial governments to control the flow of goods and capital in the subregion. For example, Thailand's postwar attempts to install more extensive quantitative import restrictions have always been stymied by the efforts of its trading groups to undermine such rules. Socialist governments never fully controlled cross-border trade in gold and precious stones (not to mention hardwood and drugs) nor suppressed household traditions of saving in these valuable assets in all of mainland Southeast Asia.

The process of opening, accelerated by the collapse of the COMECON and stimulated both by the increase in currency-mediated domestic transactions and inflation, began a process in which foreign currencies began to circulate extensively in the domestic economy. In Vientiane, transactions occur interchangeably in the Lao kip, the Thai baht, and the U.S. dollar. In the case of Vietnam, the widespread use of the U.S. dollar emerges after the government permits its state trading enterprises to deposit their balances abroad in domestic foreign currency deposits, in response to a severe credit crunch in 1991; it has significantly displaced gold as a store of household wealth. The return of the dong funds after the Vietnamese pullback from Cambodia generated its own inflationary pressures within Vietnam (Dollar 1993). Gold is used as

an important household savings asset and a key unit of account and payment medium for transactions in land and real estate in all these countries.

Tolerating the circulation of other currencies was a key element in the non-price resource mobilization strategy of Lao PDR and Vietnam. For both countries, this strategy not only facilitated the expansion of external trade, it helped to increase the level of domestic deposits. However, their availability has set lower limits to interest rates on domestic currency deposits; interest on domestic currency deposits were often higher than interest on loans, as a consequence. The use of other currencies also complicates savings mobilization in the long-term. With only a rudimentary banking system and limited capacity for bank regulation, the countries find themselves in an extremely competitive situation with foreign users of funds for resources generated from within their own economy. Based on Bank of Thailand estimate of Lao residents' deposits in banks located in the Thai Northeast, the level of baht deposits amounted to two-thirds of total private sector current, savings, and foreign exchange deposits in Lao commercial banks in December 1991 (Sundberg 1993, p. 18).

**Collapse of credit cooperatives and credit overhang.** Both countries saw the meteoric rise and subsequent collapse of credit cooperatives just about the time when market reforms were accelerated in 1989. As quasi-formal institutions, these credit cooperatives had the power to accept deposits and extend credit with little supervision from the monetary authorities. In Vietnam, these cooperatives were located in the south. By offering high interest rates (as much as 5-8 percent per month), they expanded rapidly; their collapse in the 1989-90 in both countries inflicted huge losses on many small businesses and households and damaged public trust in these institutions. These institutions were quite large. For example, Sundberg (1993, p. 17) refers to a cooperative that went bankrupt with \$1 million in deposits and \$3.5 million in interest receivable.

Both countries have installed what has come to be called the "two-tier" banking system, which separates the central bank from other financial institutions in the system, in contrast to the old system in which the central bank managed the deposits of the state across the country. Under the new system, banks are permitted within guidelines of total credit ceilings (based on overall monetary targets) and interest rate ceilings to choose their customers (i.e. not necessarily lend to the government) and their loan projects.

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The inhibitions of the new banks to finance more than import-export trade and the parallel reluctance of domestic firms to borrow explains the sustainability of high levels of interest rates; in turn, high rates of interest helps banks are consistent with the stock of debt arrears still in the books of state enterprises. The level of this debt being carried in the books of state enterprises (owed to other state enterprises) is relatively low by East European standards; Dollar (1993, p. 18) contrasts the estimate of the total of interfirm credits and bad debts to be about 5 percent for Vietnam compared to about 25 percent for Russia and Romania. The uncertainty regarding whether even the debt overhang will be monetized began to subside for both countries near the end of 1992 (as evidenced by the incipient appreciation of their currencies). Interest rates have also declined for both countries (Table 6 for Lao PDR and Table 8 for Vietnam for the most recent period).

The vitality of domestic financial institutions is a critical issue for both countries to the extent that both have permitted foreign banks to begin to participate domestically at the same time that they consider it imperative to develop a responsive domestic financial sector.

**Budget deficits from salary and subsidy systems.** Both Lao PDR and Vietnam have had to wrestle with their salary and subsidy systems in order to control fiscal deficits. Both have made advances, particularly in terms of reducing the claims of state enterprises on the general budget but have a range of outstanding issues to address.

The budget deficits arise from the operations of the state enterprises. Both countries were not saddled by large, nationally-directed industrial organizations that characterized the Eastern European context, where the major approach has been drastic privatization. In contrast, privatization has not been a major theme in the reform programs of these two countries (Van Arkadie 1993, p. 16); in Eastern Europe, the proposition was that there is no halfway house, that it is not possible to transform a company's responsiveness to market stimuli without changing its ownership. It is arguable that the industrial structure in these two countries might be even more susceptible to rapid privatization.

Instead, the state has dared to test the extent to which its enterprises, still owned by the state, would survive in a market environment. The principal mode has been to transfer autonomy to state enterprises, initially beginning with a distinction between those enterprises that would still be subject to central planning, receiving

inputs from the state and subject to state prices and output targets, a second group that would only be partly subject to planning directives, and a third and largest group which would be ineligible to receive state inputs but could set their own prices and be subject to a profits tax. Many state enterprises are local or provincial and in light manufacturing, as in China, and have been able to respond quite well to market incentives; the larger enterprises have been the largest source of losses. For both the viable and unviable enterprises, the state has had to address changes in the system of salary adjustment and subsidies.

Both Lao PDR and Vietnam utilized payment-in-kind salary systems for state workers based either on direct delivery of goods or a chit system on government stores. The initial surge of deficits came from the need to adjust these real salaries to changes in the prices of goods as a result of price and trading reform. With the operational autonomy came another set of pressures as managers and workers voted themselves salary increases and bonuses and it required effort on the part of central authority to insist that these bonuses be drawn out of enterprise profits.

Subsidies for the enterprises came out of the investment budget and the external procurement of inputs for state enterprises. With the collapse of the Soviet Union, the cost of latter subsidy rapidly increased.

We would now like to examine the approaches Lao PDR and Vietnam undertook in the area of resource mobilization in the course of transition. It has become customary to use the terms 'strategy' or 'good policy' and, given the relatively successful record (often carelessly devalued by reference to a more favorable starting point), these terms might not appear to be too grand a characterization. What we hope to convey, however, is the relatively unorthodox search for growth and resource mobilization and the ongoing difficulties endemic to this reform approach.

### **Lao PDR**

While the Lao economy did not have the extensive set of industrial enterprises and collectivized farms of other socialist economies, it did have a national bank in the classic socialist mode of having as its sole purpose the management of the state's finances, acting as its cashier and payment agent. The state bank provided credit to state enterprises which in turn remitted back (often negotiated proportions of) depreciation allowances and operating surpluses. Most enterprises contributed negatively to state revenue even before the market reforms took place, a notable

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exception being Electricite du Lao, a public utility which also exports electricity to Thailand (Sundberg 1993, p. 5).

The savings rate remained well below 0.3 percent (see Table 7) until 1991 when reforms were well underway, and even at the present time the rate is very low. Investment and deficit financing relied on the Soviet aid. In 1986, the current account deficits reached 13 percent of GDP and the budget deficit 15 percent.

Just as in Vietnam, reforms (which could later on be called as being 'market-oriented') were responses to the feeble resource mobilization and attempts to reduce dependence, initially self-motivated but with the subsequent collapse of the Soviet Union present, on external assistance. The formal sector of the Lao economy operates in a very porous manner alongside Thailand's northern economy, and the growth of parallel markets always represented a threat to economic control and a weakening of the state's power to mobilize domestic resources. It would be fair to say that resource mobilization in favor of the state always constituted a overriding motivation for Lao PDR reforms.

Lao PDR began reforming the price mechanism in the goods market in the 1980 with the dismantling of agricultural cooperatives and a return to the cultivation of individual farming plots, in response to the sluggish growth in output under the cooperative system. In 1985, the state began reforming the state enterprises on an experimental basis, calling for a "New Economic Mechanism" (NEM), by devolving the decision on production levels, investment, wages, and output prices to selected enterprises and substituting a profits and turnover tax on enterprise operations for enterprise remittances to the central budget. In 1987, the state abolished state procurement prices for rice and other agricultural products which were part of the wage-in-kind system. Despite these moves, the autonomous state enterprises continued to run losses and the government felt compelled to move toward a deliberate privatization of these enterprises, beginning in 1989. But as in experiences even in market economies progress has been slow because of the demands of the process to address the arrears of the enterprise and deal with the resulting loss of employment of the workforce.

The immediate impact of enterprise reform was reduced fiscal revenue, by as much as 3 percent of output between 1987 and 1988 (Sundberg 1993, p. 12). Responding to the new tax system on profits, managers and workers raised their wages and bonuses. The freeing of the price mechanism on inputs also squeezed enterprise

profits from which revenues had to be collected. Growth was maintained through the ratcheting up of external borrowing, based on Lao PDR's successful diversification of foreign policy; if economic growth had fallen, the fiscal regression would have reached crash proportions. External assistance raises the public sector's deficit based on the start-up of capital investment projects. In the case of the Lao PDR, the halving of the budget deficit from 20 percent in 1988 to 10 percent in 1991 came mainly from reducing capital expenditures (Sundberg 1993, p. 13). Civil service wages continue to be the most difficult part of the budget to reduce.

Interest rate policy began to be actively used in 1989, directed mainly at 'inveigling' state enterprises to maintain their idle balances in the banking system. The state bank also sought to capture savings in foreign accounts and in the informal sector (much in the form of gold or other currencies) in order to help finance its deficit. The state bank offered deposits at positive real rates of interest. Table 6 shows a doubling of the nominal rate of interest on savings deposits in 1989, and almost another doubling to a rate of 24 percent in 1990. The effect is an increase by 2.3 times of savings and time deposit balances between 1988 and 1989 and a 2.8 times increase in 1990 (Table 7). These balances continue to more than double in 1991 and 1992 and increase by 1.5 times in 1993 in spite of the plateauing and decline of interest rates, reminding us once again that it is the real, not the nominal, interest that is important.

It is remarkable that before and during the period when the Lao government sought to ensure positive real interest rates on deposits, lending rates fell below deposit rates. The last column of Table 7 shows how lending rates have been lower than deposit rates since 1980. The pattern demonstrates a patent disregard of cost conditions and market principles, which Sundberg (1993, p. 15) attributes to difficulties arising from "political and other reasons." There is no reason to doubt the accuracy of this interpretation. It is important however to note that the interpretation enshrines the attainment of partial equilibrium in the banking market above all other markets and above the trend in macroeconomic performance.

While it would be problematical to attribute some general equilibrium prescience to the government, it is still clear that the patterns in Table 7 themselves testify to a lowering of inflation and an increase in the cost of capital, patterns that have been very difficult to attain in many other developing countries, including those enjoying generous foreign assistance as the Lao PDR was during this period. Another way to exonerate the approach on economic grounds is to consider the possibility that

the strongest competing markets are those in banking deposits in Thai banks across the Mekong, which forces the provision for at least an exchange risk premium on domestic deposits. The implicit subsidy to investment on the lending rate side helps to sustain the rate of growth and moderates the interest cost of state enterprise deficits.

The overall effect, as has already been presented, has been the mobilization of resources from both the state sector and private agents for the use, at least up to the recent period, mainly by the state and the maintenance of the growth rate. In real terms, interest rates are still high and the "mechanism" of setting the price of capital is still dependent on state fiat, so that the mechanism is not that of the encounter of capital demand with supply.

It is difficult to predict when the Lao government will surrender the setting of interest rates to the tender mercies of a genuine market mechanism. The fiscal deficit, the weakness of the domestic commercial banks due to inexperience of personnel, the inherent volatility of Lao output from year-to-year due to the strong effect of rain or drought on rice and electricity output, and the fact that there are still other institutional steps, such as the improvement in prudential regulation framework, that can be undertaken first, support a case for a 'step-by-step' (to use a phrase often used in the country) approach to liberalizing interest rates. In any case, whether market determined interest rates are the proper guide to investment has itself become a controversial issue even in Western economics.

### **Vietnam**

Before Vietnam's move to a market economy, the state undertook and controlled resource mobilization through its state enterprise sector. Credit was officially only extended to state enterprises, based on the budget plan. The financing of investment relied almost wholly on foreign aid. The share of foreign assistance in the budget fluctuated between 50 and 70 percent during the war years 1965-75, dropped to 30-40 percent between 1976 and 1980, fell to about 15 percent in 1984 (XD)X,D 1993, p. 3). In 1993, it was estimated to be 12 percent.

Household saving, except for long-term deposits paying low interest rates and mobilized through patriotic appeals or compulsory bonds that paid little or no interest, mainly took the form of gold (D)X,D 1993, p. 2). Traders were mobilizing informal, clandestine credit at high interest rates, especially in the rural areas with the trade of "young rice" (rice traded before being harvested). Rice itself was an important

temporary and relatively inflation-proof store of savings, with an estimated 1/12 the of the rice crop finding itself in rice hoards.

Vietnam's path to a market economy began with the dismantling, over an extended period between 1981 and 1990, of the system of state-posted prices of goods. Until 1985, these efforts took the form of accelerating the process of updating regulated prices (Dang 1993, p. 6). This process became self-defeating in light of the institutional reality that the wage payment system for state workers amounted to payment-in-kind for the most basic consumer goods. Updating consumer prices raised salary costs, which worsened enterprise deficits and created new demands for money creation. Vietnamese authorities originally interpreted the resulting inflation to be due not so much to money creation (Dang 1993, p. 11), but to supply inadequacies and, in Keynesian bent, sought ways to increase investment spending to increase supply.

Even though it permitted the unification of the goods markets, the withdrawal of the state from setting goods prices, mostly completed by 1989, only exacerbated this inflationary system, whose dynamics would continue as long as the wage payment and subsidy system in the state enterprise sector remained the same. In 1986, money creation financed 30.6 percent of the state deficit. This jumped to 64.5 percent in 1987, 68.2 percent in 1988, and only began to decline to 67.3 percent in 1989, and steadily to 10.0 percent by 1992 (Table 9). Table 9 actually illustrates the extent to which savings mobilization has shifted decisively in Vietnam. In 1991, the state managed to finance 65 percent of its deficit from domestic borrowing.

While the impetus of the wage system on inflation would continue to rage, the state sought ways first to reduce other subsidies to state enterprises. Just as one would be reluctant to ascribe to 'the market' supra-intelligence to coordinate demands and supplies, it would be problematical to assign to the state an omniscience about reform sequencing. It is symptomatic of the state's problem in macroeconomic stabilization that issues of savings mobilization became unavoidable in Vietnam when hyperinflation loomed in late 1990 as a consequence of the money injections of the previous two years and the apparent inability of extreme interest rate policies of 1989 to stamp out inflation, the year when a 79 percent devaluation was also carried out.

In 1989, the authorities began with attempting to set the deposit rate at higher than the inflation over a banking system still completely under their control. Table 8 attempts to reconstruct the trend in the monthly inflation rate, monthly interest rates on 3-month deposits, and lending rate for working capital which have been consistently

higher than those for fixed investment. Beginning with 6 percent rate of interest in March, with monthly inflation running at 5.4 percent, interest rates were ratcheted up to 12 percent per month in June which actually caused deflation. However, inflation rates began to creep up again the last quarter of 1989.

The first subsidy to be eliminated in 1990 was that applied to imported raw materials. The state began selling raw materials to other state enterprises at international prices and did not provide these operations any additional subsidized credit; these subsidies completely ceased in 1991. This, coupled with the ability of enterprises to set their own selling prices, improved state resource mobilization noticeably, but also transformed the resource mobilization problem into the form of state enterprise losses, causing the growth rate of industry to fall from 3.6 percent in 1989 to 2.5 percent in 1990. A process of enterprise dissolution was set in train, resulting in a total number of layoffs estimated at 800,000 from 1989 to 1992 (Dollar 1993, p. 9). In January 1992, it was estimated that only 7,100 of 12,800 state enterprises were commercially viable (Dang 1993, p. 7) and the losing enterprises will have to be disposed or transformed into joint ventures. The rate of closure of loss-making enterprises has been severely constrained by the insufficiency of funds for separation allowances.

Revenues as a proportion of output have remained relatively stable between 1989 and 1992, as a consequence of the rapid increase in oil revenue compensating for losses in other revenue sources. The principal reason for the protection of revenue is that growth has been maintained and that the adjustment path did not include a dramatic recession.

The (abnormally) high margin between the inflation rate and deposit rates maintained until the end of 1992 could not but mobilize increased savings from the population:

The share of individual savings in total cash deposits in banks grew from 4.4 percent in 1986 to 31.9 percent in 1989 to 37.9 percent in 1990. Since June 1991, the Treasury began to sell treasury bonds and bills to mobilize money from people to finance the budget deficit. The amount of money received through selling the bonds and bills in two years, from June 1991 to June 1993, went up 70 times, though the interest rates on treasury bonds fell in real terms. (Quinicine 1993, p. 10).

In August 1992, the Treasury discontinued the 3-month bills.

The management of external capital assets and the exchange rate constitute the last key element in Vietnam's generally successful savings mobilization in the midst of

transition. The government devalued the dong from 900 to 4300 to the U.S. dollar in 1989, to 6800 in 1990, and 11,000 in 1991. Van Arkadie (1993) describes the foreign exchange policy of Vietnam as "unorthodox and successful" (p. 24). The 1989 devaluation actually involved the replacement of a multiple exchange rate system with a dual rate, based on an official and unofficial rate. The official rate was based on the surrender requirement foreign exchange earnings of state enterprises, but authorities permitted even these entities to engage in direct, "quasi-legal" transactions. The margin between the official and unofficial exchange rate was 12.2 percent in 1989 and 9.4 percent in 1990, not very large but still represents a subsidy to those with access to the legal market. The widening incidence of the unofficial transactions led authorities to attempt to crack down, with mostly feeble impact.

In January 1991, the authorities permitted the opening of foreign currency deposits and interest rates set at higher than dong-denominated deposits. The most dramatic savings mobilization impact occurred after October 1991 when the requirement to surrender foreign exchange to government banks was lifted and this induced state-owned firms to remit their foreign balances into the domestic banking system.

The rapid increase in Vietnam's exports (mainly of rice and petroleum to 'convertible' currency' countries) in 1989 and 1990 compensated partly for the limited in foreign financing. Exports have remained strong and with the end of the U.S. embargo the external financing constraint is expected to ease, even though the treatment of accumulated arrears to Russia and Eastern European countries needs to be faced soon.

## **CONCLUSION**

Resource mobilization represents a continuing challenge to the two economies if these economies are to attain growth rates in the range of 7 percent without increasing their external dependence, which is already at elevated levels. The approach to mobilization in the last 4 years has permitted an increase in domestic financial resources and the avoidance of a growth slowdown, but has also created new problems or postponed old ones that have to be faced soon. The *de facto* dual or triple currency systems will have to change.

State enterprises still claim a significant amount of state revenue, in particular current expenditures in both these enterprises and in government agencies themselves.

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This is a time when demand for infrastructure improvement and maintenance are critical to maintain the growth momentum. (In order to be able to more rapidly reduce state expenditures on salaries, both countries are trying to install an unemployment insurance system, an institution that does not exist in any of the market economies of Southeast Asia.) It also remains to be seen whether a domestic private sector can continue to emerge around or in spite of the high interest economic regime. It must be pointed out that in the rest of Southeast Asia the formal financial system has generally assisted only large, established enterprises and in China the rechanneling of state resources at the provincial level has played a key role in the growth of private activities.

The standard economic model proclaims the level of savings to be determined by the rate of real interest and the expected inflation rate, with the current inflation rate being determined in turn by the rate of money creation. When Lao and Vietnamese authorities raised deposit rates and observed an increase in deposits and when they printed money and observed rising inflation, they traced out these hypotheses in their national statistics. The problem was not so much the mechanical relationship between these variables but (1) first of all to understand how interest rates and money supply came to be set the way they are so that responses genuinely related to the problem can be considered (Van Arkadie 1993, p. 26), and (2) secondly, to pay attention to the interaction between markets, between sectors of the economy, and between the national economy and other economies.

When a government loses monetary control, it is often not the case that the government sets out to relinquish such control. Both governments actually (and continue to) set interest rates in response to conditions they perceived and have only gradually relaxed credit allocation rules. The performance of both governments can be understood as a commitment to market principles, but it is perhaps better understood as a determination to regain the state's access to financial resources while the transition process itself was effectively undermining the state's access to these resources.

Even when the source of the problem is identified, it is often the case that the policy response often deals with other related issues first. Money creation in the two economies had been sparked by salary increases. This problem has not been fully addressed, even though the state sector has already shrunk. In terms of explicit actions, both governments dealt with other subsidies first, such as subsidies on imported raw materials, in order to reduce the state deficit.

The two countries of Lao PDR and Vietnam have managed a first phase of the transition process with a rather unorthodox set of what would ordinarily be considered second-best policies, implemented without any grand plan. That these have apparently worked is on par with the experiences of the other successful countries in Asia.

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Table 1  
Equations of the Model

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(1)	i	=	$i_p + i_g$
(2)	$i_p$	=	$i_o + \alpha i_g + \beta u$
(3)	i	=	$i_o + (1 + \alpha)i_g + \beta u$
(4)	s	=	$s_p + s_g + \phi$
(5)	$s_p$	=	$\sigma_o + \sigma_1 u$
(6)	$s_g$	=	$z - \mu j^*$
(7)	z	=	$z_o + z_1 u$
(8)	$\pi u$	=	$i_g - s_g$
(9)	$\phi$	=	$(m_r + m_k + m_o) - x - j^* - na - DR$
(10)	$m_r$	=	$a_o + a_1 u + a_2 x$
(11)	$m_k$	=	$(1 - \theta) i$
(12)	g	=	$g_o + ki$

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Table 2  
Variable Definitions

Variable symbol	Variable name	Explanation
u	Capacity utilization	Ratio of actual economic activity to potential economic activity
i	Investment rate	Total investment in proportion to potential output
$i_g$	Government investment	Government investment in proportion to potential output
$i_p$	Private investment	Private investment in proportion to potential output
$s_g$	Government savings	Current budget surplus of the government in proportion to potential output
$s_p$	Private savings	Non-government savings. Estimated as a residual based on realistic and consistent ICOR figures and other indicators of private investment activity
$\phi$	Foreign savings	Current account deficit in proportion to potential output
$j^*$	Foreign interest payments	Total interest payment on foreign debt in proportion to potential output
$\pi$	PSBR	Public sector borrowing requirement in proportion to actual output
$m_r$	Intermediate imports	Imports of raw materials and intermediate goods in proportion to potential output
$m_k$	Capital imports	Imports of capital goods in proportion to potential output
$m_o$		Imports of other goods in proportion to potential output
$\theta$		Proportion of capital investment supplied domestically
x	Exports	Exports in proportion to potential output
na		Net aid in proportion to potential output
DR		Normally, the change in international reserves in proportion to potential output. In accounting terms, all other items in the balance of payments. For Vietnam, for the calibration year, included change in arrears.

Table 3  
Equilibrium Data Sets, Vietnam 1991 and Lao PDR 1992  
(as a fraction of potential economic activity)

Variable	Variable definition	Vietnam	Lao PDR
u	Capacity utilization	0.73	0.89
g	Growth of potential economic activity	0.038	0.071
i	Total investment	0.062	0.125
i <sub>g</sub>	Government investment	0.042	0.083
i <sub>p</sub>	Private investment	0.020	0.042
s <sub>g</sub>	Government savings	0.0153	-0.048
s <sub>p</sub>	Private savings	0.0059	0.094
φ	Foreign savings	0.0408	0.078
π	PSBR	0.058	0.147
j*	Foreign interest payments	0.060	0.008
m <sub>r</sub>	Imports of raw materials and intermediates	0.090	0.076
m <sub>k</sub>	Imports of capital goods	0.015	0.107
m <sub>o</sub>	Other imports	0.007	0.010
na	Net foreign assistance	0.012	0.054
DR	Change in reserves/arrears/other items	0.03	0.000

Table 4  
Assumptions and Parameters, Lao PDR

	For equilibrium data set	Growth scenario
Elasticity of fiscal effort	0.4	0.4
Elasticity of private saving	0.3	0.3
Elasticity of intermediate import demand with respect to overall activity	0.8	0.8
with respect to exports	0.15	0.15
Accelerator coefficient, $\beta$	0.03	0.03
Private response to government investment	0.3	0.3
ICOR (1/k)	1.75	1.75
Proportion of investment sourced domestically	0.38	0.38

Table 5  
Assumptions and Parameters, Vietnam

	For equilibrium data set	Growth scenario
Elasticity of fiscal effort	0.9	1.0
Elasticity of private saving	0.8	0.8
Elasticity of intermediate import demand with respect to overall activity	0.8	0.8
with respect to exports	0.19	0.25
Accelerator coefficient, $\beta$	0.05	0.05
Private response to government investment	1.5	1.5
ICOR (1/k)	1.0	1.5
Proportion of investment sourced domestically	0.85	0.85

Table 6  
Inflation and Interest Rates, Lao PDR 1977-1992

Year	Nominal interest rates						
	Vientiane CPI inflation	Savings	One-year time deposit	Lending rates		Ex-post real interest (1 year)	Lending- deposit differential
				Short	Long		
1977	341	1.2	3.6	6.0	3.0	-337.1	2.4
1978	144	1.2	3.6	6.0	3.0	-140.5	2.4
1979	93	2.4	5.4	5.4	3.0	-87.6	0.0
1980	76	3.6	7.2	4.8	3.0	-68.4	-2.4
1981	34	3.6	7.2	4.8	3.0	-26.5	-2.4
1982	70	3.6	7.2	4.8	3.0	-63.2	-2.4
1983	63	3.6	7.2	4.8	3.0	-55.3	-2.4
1984	27	3.6	7.2	4.8	3.0	-20.0	-2.4
1985	90	4.5	8.4	5.6	3.3	-81.1	-2.9
1986	34	5.4	9.6	6.3	3.6	-24.4	-3.3
1987	6	5.4	9.6	6.3	3.6	3.4	-3.3
1988	7	7.2	14.0	12.0	8.0	6.9	-2.0
1989	60	13.8	22.8	16.0	9.6	-36.7	-6.8
1990	36	24.0	36.0	22.0	12.0	0.3	-14.0
1991	13	21.0	31.5	22.5	15.0	18.1	-9.0
1992	10	12.0	18.0	23.0	18.0	8.1	5.0

NOTES:

- The Vientiane CPI is the only price index available at present.
- Annual interest rates were averaged within periods by weighting by the number of months at which each rate was applied.
- The lending rate reported is for the industrial sector, which is around the middle of the distribution across sectors.

Source: Sundberg (1993), Table 2.

Table 7  
Savings in the Formal Banking System  
(in the end of period, millions of kip)

Year	Savings and time deposits (yearend)	Currency in circulation	Total liquidity	Savings/GDP (percent)
1979	4	100	291	0.2
1980	10	157	768	0.2
1981	20	169	805	0.3
1982	17	236	1,222	0.1
1983	27	320	1,695	0.1
1984	37	450	1,692	0.1
1985	54	635	2,280	0.1
1986	95	1,047	3,876	0.1
1987	60	2,091	15,842	0.0
1988	136	3,486	21,715	0.1
1989	319	16,842	41,114	0.1
1990	899	18,570	44,340	0.1
1991	4,200	19,217	51,313	0.6
1992	9,666	22,827	76,462	1.1
1993:3	14,385	25,819	78,292	1.7

Source: Sundberg (1993), Table 3.

Table 8  
Inflation and Interest Rates, Vietnam 1989-1993  
(percent per month)

	Inflation	Deposit rate (3-month time)	Lending rate (working capital)
<b>1989</b>			
March	5.4	6.0	10.8
June	-2.9	12.0	3.7
September	1.6	7.0	3.7
December	3.0	7.0	3.7
<b>1990</b>			
March	1.9	4.0	3.7
June	2.1	4.0	3.7
September	4.7	4.0	3.7
December	8.9	4.0	3.7
<b>1991</b>			
March	0.6	3.5	
June	1.9	3.5	
September	3.7	3.5	3.0
December	6.1	3.5	3.3
<b>1992</b>			
March	5.5		
June	0.1	3.0	4.2
September	0.0	2.3	3.5
December	1.4	2.4	2.0
<b>1993</b>			
April	0.3	1.7	

Sources: Nguyen (1993), Dam (1993), and Dollar (1993).

Table 9  
 Structure of Financing Sources  
 for State Budget Deficit, 1981-1992  
 (percent of deficit)

	1981- 1985	1986	1987	1988	1989	1990	1991	1992
Printing money	30.6	64.5	68.2	67.3	58.7	47.9	10	---
Loan, debt and foreign aid	65.7	35.5	29.5	31.1	41.3	42.2	25	52
Domestic loans	3.7	---	2.3	1.6	---	9.9	65	48

Source: Dang (1993), Table 11.

Table 10  
Bank Deposits, Vietnam  
(billion dong)

Households	Demand	3-month	Other	Total
March 1989	96	82	31	207
April 1989	128	181	43	352
May 1989	192	253	52	497
June 1989	237	328	45	609
August 1989	218	362	56	636
September 1989	260	530	92	882
October 1989	313	650	107	1,070
November 1989	341	772	106	1,219
December 1989	350	895	102	1,348
Ten-month growth (percent)	630			

State enterprises	Current	Demand	Term	Total
March 1989	406	0	0	406
April 1989	421	2	1	424
May 1989	358	83	3	442
June 1989	353	66	7	426
July 1989	477	100	10	586
August 1989	506	138	18	663
September 1989	557	202	23	1,665
October 1989	590	258	32	880
November 1989	773	277	38	2,208
December 1989	763	271	38	1,072
January 1990	903	214	43	1,159
Ten-month growth (percent)	185			

Ten-month growth, households and state enterprises (percent)	335
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Source: Fforde and de Vylder (1993), Table 14.

Chart 1  
Lao PDR's Macroeconomic Constraints

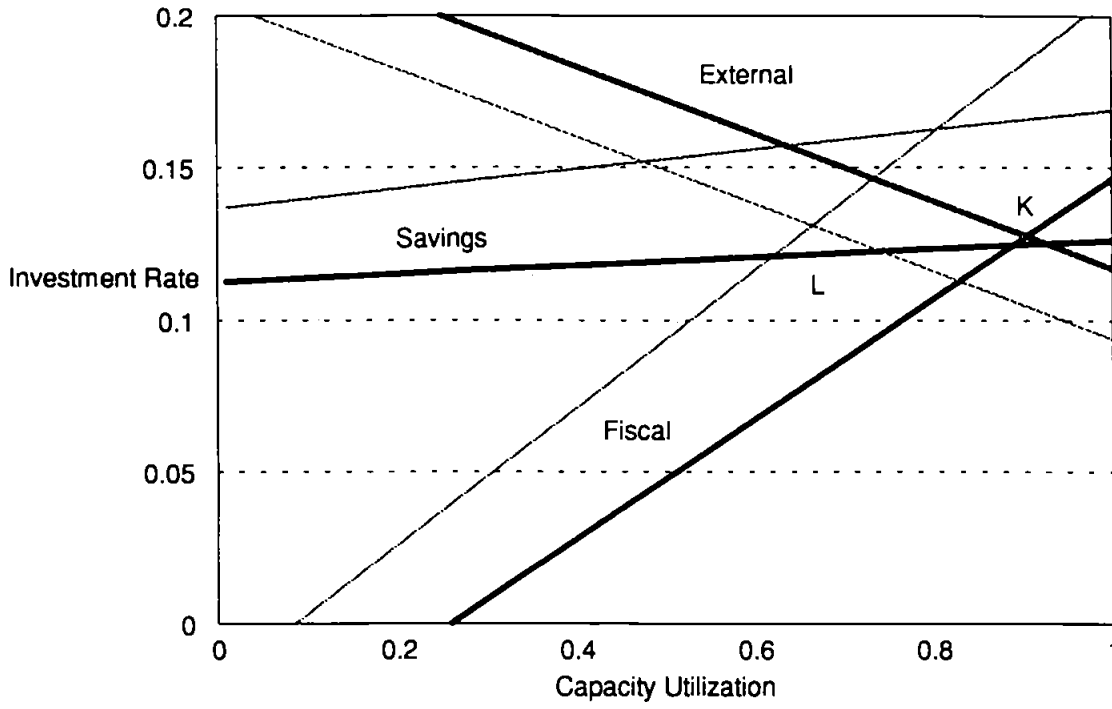


Chart 2  
Vietnam's Macroeconomic Constraints

